



421204



048384

quality of the document  
being filmed

PRELIMINARY ASSESSMENT FOR  
EMPIRE STATE OIL COMPANY REFINERY - THERMOPOLIS

PREPARED BY: KATIE SEWELL

DATE: MAY 18, 1984

The Empire State Oil Company Refinery is located on the southeast edge of Thermopolis in central Wyoming. The site is bounded on the east and south by the Big Horn River, on the west by a railroad spur, and on the north by Amoretti Street. Katie Sewell of the Wyoming Department of Environmental Quality (WDEQ), Solid Waste Management Program visited the site on March 30, 1984.

The refinery in Thermopolis was operated by Empire State Oil Company from 1938 until it shut down in 1969. In August of 1972, Ashland Oil Company acquired all domestic assets of Empire State Oil Company including their Thermopolis refinery. Ashland Oil Company then deeded the property in September of 1972 to the Gottsche Foundation, which runs a rehabilitation center in Thermopolis.

According to Mr. John Herrin, former president of Empire State Oil Company, the capacity of the refinery was 7,000 barrels per day. Asphalt, fuel oil, diesel fuel, and distillate were produced but no gasoline was made because the crude was too heavy. The facility had an API separator and several other pits or ponds that can be seen on a Wyoming Highway Department aerial photograph. There was also a large pond containing water used for fire protection and boiler water.

Doug Warnock with the Gottsche Foundation, current owners of the site, took Katie Sewell and Marge Knight (WDEQ, Solid Waste) on a tour of the site. All of the tanks were removed in 1974 by Ashland Oil Company and the site was leveled. Old refinery buildings remain on the north edge of the site but otherwise the land is covered with vegetation and a few scattered piles of building materials.

The pond used for fire protection and boiler water is still in existence. Dead fish were seen around the edge of the pond and old tires, wood, pipes and other debris could be seen in the bottom. The sediment was a black silty material and when disturbed with a stick, tiny droplets of oil would come to the surface and form a sheen on the water. No seeps or stained soil were seen on the bank of the Big Horn River directly east of the pond.

SITE / SITE ASSESSMENT

BAS006

10711

PRELIMINARY ASSESSMENT FOR EMPIRE STATE OIL COMPANY REFINERY  
MAY 18, 1984  
PAGE 2 of 2

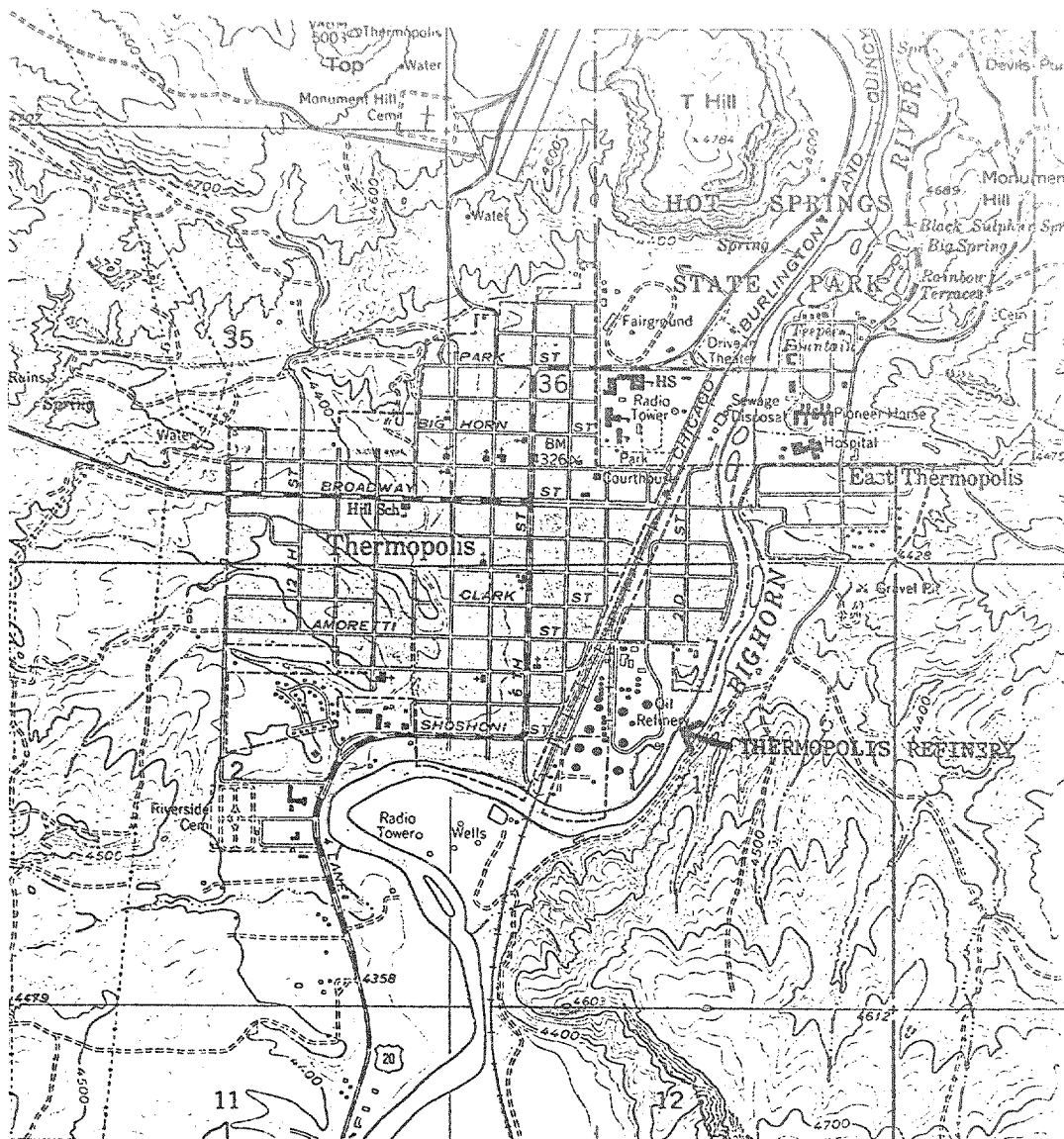
The API separator and several other ponds or pits were located directly north of the pond. This area has been covered. Ashland Oil Company has no records of cleanup and disposal of materials in this area. Mr. Herrin remembered the API separator being cleaned and tank bottoms being taken to the city dump.

There is concern at this site about the potential for ground and surface water contamination. It is a common occurrence at refineries in Wyoming to have a layer of hydrocarbons on the groundwater and seepage into nearby rivers. These hydrocarbons can come from leaking tanks, leaking underground pipes, spills, and disposal area. The groundwater is very shallow and the Big Horn River bounds the Thermopolis Refinery on the east and south.

CONCLUSION:

There is not enough information on the former Empire State Oil Company Refinery to determine if an environmental hazard exists. It is recommended that a site inspection with sampling be conducted at this site to further define potential problems. Sampling should include, but not necessarily be limited to: 1) determination of contamination of groundwater under the refinery, 2) analysis of pond water and sediment, 3) possible contamination near covered API separator, and 4) sampling of Big Horn River for contamination.





EMPIRE STATE OIL COMPANY  
THERMOPOLIS REFINERY  
Thermopolis, Wyoming

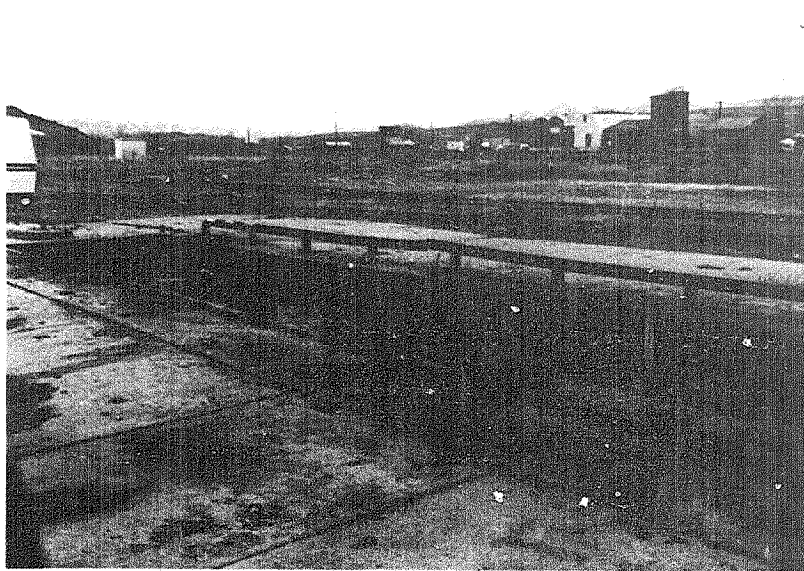
site location map  
1" = 2000'

reference: USGS topo map  
Thermopolis quad



THERMOPOLIS REFINERY  
Thermopolis

K. Sewell  
March 30, 1989



possible loading area



dead fish in water holding pond



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
WY D980807762

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site) Empire State Oil Company		02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER 242 Amoretti St.			
03 CITY Thermopolis		04 STATE WY	05 ZIP CODE 82443	06 COUNTY Hot Springs	07 COUNTY CODE 08 CONG DIST
09 COORDINATES LATITUDE 43° 38' 21" N LONGITUDE 108° 12' 25" W					

10 DIRECTIONS TO SITE (Starting from nearest public road)

located in East Thermopolis, bounded on the south and east by the Big Horn River and on the west by the CB&Q railroad

III. RESPONSIBLE PARTIES

01 OWNER (If known) Gottsche Foundation		02 STREET (Business, mailing, residential) P.O. Box 790			
03 CITY Thermopolis		04 STATE WY	05 ZIP CODE 82443	06 TELEPHONE NUMBER (307) 864-2147	
07 OPERATOR (If known and different from owner) Ashland Oil Company		08 STREET (Business, mailing, residential)			
09 CITY Ashland		10 STATE KY	11 ZIP CODE	12 TELEPHONE NUMBER ( )	
13 TYPE OF OWNERSHIP (Check one) <input checked="" type="checkbox"/> A. PRIVATE <input type="checkbox"/> B. FEDERAL: _____ (Agency name) <input type="checkbox"/> C. STATE <input type="checkbox"/> D. COUNTY <input type="checkbox"/> E. MUNICIPAL <input type="checkbox"/> F. OTHER: _____ (Specify) <input type="checkbox"/> G. UNKNOWN					

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)  
☐ A. RCRA 3001 DATE RECEIVED: \_\_\_\_/\_\_\_\_/\_\_\_\_ MONTH DAY YEAR ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: \_\_\_\_/\_\_\_\_/\_\_\_\_ MONTH DAY YEAR ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION <input checked="" type="checkbox"/> YES DATE 3/30/84 MONTH DAY YEAR <input type="checkbox"/> NO		BY (Check all that apply) <input type="checkbox"/> A. EPA <input type="checkbox"/> B. EPA CONTRACTOR <input checked="" type="checkbox"/> C. STATE <input type="checkbox"/> D. OTHER CONTRACTOR <input type="checkbox"/> E. LOCAL HEALTH OFFICIAL <input type="checkbox"/> F. OTHER: _____ (Specify) CONTRACTOR NAME(S): _____			
---	--	--	--	--	--

02 SITE STATUS (Check one) <input type="checkbox"/> A. ACTIVE <input checked="" type="checkbox"/> B. INACTIVE <input type="checkbox"/> C. UNKNOWN		03 YEARS OF OPERATION BEGINNING YEAR 1938 ENDING YEAR 1969 <input type="checkbox"/> UNKNOWN	
--	--	--	--

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

petroleum refining wastes

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

potential for groundwater and surface water contamination

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)  
☐ A. HIGH (Inspection required promptly) ☒ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT Doug Warnock		02 OF (Agency/Organization) Gottsche Foundation		03 TELEPHONE NUMBER (307) 864-2147	
04 PERSON RESPONSIBLE FOR ASSESSMENT Katie Sewell		05 AGENCY WDEQ	06 ORGANIZATION Solid Waste	07 TELEPHONE NUMBER (307) 777-7752	08 DATE 5 / 2 / 84 MONTH DAY YEAR



A TOXIC	E SOLUBLE	I HIGHLY VOLATILE
B CORROSIVE	F INFECTIOUS	J EXPLOSIVE
C RADIOACTIVE	G FLAMMABLE	K REACTIVE
D PERSISTENT	H IGNITABLE	L INCOMPATIBLE
		M NOT APPLICABLE

## VI. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE 02 SITE NUMBER  
WY D980807762

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )  
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

the groundwater is very shallow (from 25 to 60 feet deep)

01 ☒ B. SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )  
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

the Big Horn River bounds the site on the east and south

01 ☐ C. CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

01 ☐ E. DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

01 ☒ F. CONTAMINATION OF SOIL

03 AREA POTENTIALLY AFFECTED: \_\_\_\_\_  
(Acres)

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )  
04 NARRATIVE DESCRIPTION

☒ POTENTIAL ☐ ALLEGED

the entire site has been covered and leveled

01 ☐ G. DRINKING WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

01 ☐ H. WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED

01 ☐ I. POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

02 ☐ OBSERVED (DATE: \_\_\_\_\_ )  
04 NARRATIVE DESCRIPTION

☐ POTENTIAL ☐ ALLEGED



POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT  
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION  
01 STATE 02 SITE NUMBER  
WY D980807762

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA 02 ☐ OBSERVED (DATE: ) ☒ POTENTIAL ☐ ALLEGED  
04 NARRATIVE DESCRIPTION

site is covered with vegetation permitting possible uptake of contaminants into the flora

01 ☒ K. DAMAGE TO FAUNA 02 ☒ OBSERVED (DATE: 3/30/84 ) ☐ POTENTIAL ☐ ALLEGED  
04 NARRATIVE DESCRIPTION (include name(s) of species)

dead fish observed in abandoned pond on site, cause unknown  
no other wildlife observed but site is not fenced

01 ☐ L. CONTAMINATION OF FOOD CHAIN 02 ☐ OBSERVED (DATE: ) ☐ POTENTIAL ☐ ALLEGED  
04 NARRATIVE DESCRIPTION

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES 02 ☐ OBSERVED (DATE: ) ☐ POTENTIAL ☐ ALLEGED  
(Spills/runoff/standing liquids/leaking drums)  
03 POPULATION POTENTIALLY AFFECTED: 04 NARRATIVE DESCRIPTION

01 ☐ N. DAMAGE TO OFFSITE PROPERTY 02 ☐ OBSERVED (DATE: ) ☐ POTENTIAL ☐ ALLEGED  
04 NARRATIVE DESCRIPTION

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs 02 ☐ OBSERVED (DATE: ) ☐ POTENTIAL ☐ ALLEGED  
04 NARRATIVE DESCRIPTION

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING 02 ☐ OBSERVED (DATE: ) ☐ POTENTIAL ☐ ALLEGED  
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: \_\_\_\_\_

IV. COMMENTS

see narrative

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports)

Wyoming State Highway Department - aerial photo - 1971  
Wyoming Department of Environmental Quality - Solid Waste site visit  
Mr. John Herrin - former president of Empire State Oil Company - Thermopolis